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1811

An

Inaugural Dissertation

on

Apoplexy

By

John Austin

1811

of Maryland.

Apoplexy has been defined by authors to be the disease, in which the whole of the external and internal senses, and the whole of the voluntary motions, are in some degree abolished; while respiration and the action of the heart continue to be performed. This disease commonly attacks suddenly, and the person affected falls to the ground in more or less of a comatose state, according to the grade of the disease; sometimes only one half of the body is affected, and in this state the patient is able to swallow liquors, and to exercise his will to a certain extent: but at other times when the disease is more violent, all voluntary motions are entirely destroyed; so that the fæces and urine, are discharged involuntarily. The face is also very often distorted, and the intellectual functions are in general completely suspended. But while the senses and voluntary motions are thus diminished or suspended, their excitement is translated to the bloodvessels, hence we perceive the pulse

synocha,

synocha, synochula, synochoid &c. But the excite=
=ment is sometimes so great, that they are prostra=
=ted beyond the point of reaction, and we see the
pulse very feeble or scarcely perceptible.
The cheeks are sometimes pale; but they are more
frequently of a red or florid colour: The face swells,
and the vessels about the head, and particular=
=ly the temples, are generally distended with
blood, and not unfrequently an hemorrhage
takes place, from the nose, mouth or ears.
The eyes are often turged, and pour forth tears,
sometimes they are half open, and appear glos=
=sy. The lower jaw frequently falls open, and the
tongue protrudes between the teeth, sometimes
with a foaming at the mouth: and a vomi=
=ting also sometimes takes place.
The respiration is difficult and laborious,
and is sometimes attended with a peculiar
noise called stertorous. The skin is often dry
and hot.

The duration of the fit may be from one minute to ten days, according to the violence of the disease, and other circumstances.

Apoplexy may terminate in three different ways, 1. In death, which is preceded for the most part by vomiting, cold sweats, and convulsions. 2. in other diseases, as Palsy &c. 3.rd and lastly, in health.

I have said that this disease often comes on suddenly; but I believe it more frequently comes on with certain precursory symptoms which are too often overlooked or neglected, viz. The whole body becomes affected with unusual dulness, with a diminution of sense and motion in the extremeties; a violent pain in the head: Drowsiness, nightmare; unusual and terrifying dreams; flatulency; snoring in persons not accustomed to it; hemorrhagy from the nose; a weakness and loss of memory and cold feet. There is also sometimes

a sudden cessation of accustomed evacuations, in those persons who are troubled with them. an inflation or sense of fulness of the face and neck; dull and false vision; a sense of sudden darkness; dull hearing; a faltering of the tongue; the inspiration fuller than usual: colicy pains also sometimes attend it. all of those symptoms that I have enumerated, do not always occur in the same person, nor in the order that I have enumerated them: but more or less of them generally take place in every person that is afflicted with this disease.

This disease is said to affect persons who are of a peculiar make and habit, particularly those who are of a short stature, fat and plethoric; and also those of large heads and short necks; and I believe such persons are more subject to it than others; but it has also been known sometimes to attack tall men as well as short and those who were not very plethoric

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and fat. It attacks both sexes, but men are much more subject to it than women. It sometimes though rarely, attacks persons in youth and middle life; but generally those who are advanced in years.

Persons who have lived in indolence, used to a full diet, and especially those who are subject to frequent intoxication, are particularly subject to this disease.

This disease is also said to be hereditary in some families. It sometimes occurs at certain seasons of the year; particularly about the autumnal and vernal equinoxes.

It is distinguished from Palsy by the suspension of the whole of the powers of sense and voluntary motion; and from syncope by the continuance of the action of the heart and arteries.

It differs from natural sleep by coming on suddenly without previous fatigue; and by

the difficulty or impossibility of rousing the patient. It may also be distinguished from coma, by attending to its previous symptoms. It may be distinguished from drunkenness by the patients, breath; and if this should not be satisfactory; by his pulse, countenance and breathing.

Narcotics also produce a disease, sometimes resembling this; but by attention the Physician will in general be able to distinguish it.

Causes; They are so numerous that I shall only briefly enumerate them.

Intemperance in eating and drinking, the indolence with a full diet, very often bring on this disease.

The stoppage of any usual evacuations, as the bleeding piles; bleeding from the nose after it has become habitual, or the healing up of an old sore which has remained open for a long time.

Painful and long application of the mind to one subject is very apt to produce this disease.
Cold and wet feet also produce it.
Ardent spirits and opium increase the impetus of the circulation in the head, or suddenly augment the quantity of the blood in it, and therefore, are a very frequent cause of this disease. Dr. Rush (as well as I recollect) and I believe very correctly) says that a fit of drunkenness is nothing but a temporary apoplexy.
Violent exercise, which acts in the manner above specified, is also liable to produce this disease.
General or the sudden application of heat, Insolation or the rays of the sun has often been known to produce it.
Violent passions of the mind, as anger &c. this appears particularly to determine the flow of blood to the head, as is evinced by the

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the florid colour of the face, and the difficulty of breathing which takes place in a paroxysm of anger; this is what is called facial apoplexy.

Long and loud speaking, also impure air from any cause whatever may produce it, particularly that from a crowded assembly.

Tight dresses and indigestible aliment, particularly toasted cheese, has often brought on this disease. Sugar of Lead and mercury have also been known to produce it.

Vomiting is often a powerful exciting cause of apoplexy, particularly when an emetic has been given which has operated to an excess.

Violent straining at stools; stooping too long at a time; or laying with the head low, may produce an accumulation of blood in the brain by impeding its return from the head.

head. any violent and sudden exertion, by producing a long inspiration will retard the passage of the blood through the lungs from the right side of the heart; and of course will interrupt the return of blood from the head; this is also evident by the appearance of the face.
A full meal, heavy supper, or the want of supper, in those accustomed to it has often produced apoplexy.
The absence of periodical gout; the neglect of undue venesection, in those cases which calls for it, has been a fruitful source of this disease.
The intemperate use of tobacco in smoking; also long, protracted headach and colic, has often brought it on: Malignant fevers have also been known to produce apoplexy.
Flexion and twisting of the neck, or any other situation of it which will compress the internal jugular veins, by obstructing

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the passage of the blood in them will bring on apoplexy; as will also ligatures when drawn too tight round the neck. Tumours on the neck act in the same way.

The immediate or proximate cause of this disease, is pressure of the brain, produced by an extravasation or intravasation of blood or serum.

Sometimes the excitement of the brain is entirely destroyed; the pressure being so great as to paralize the brain beyond the point of reaction.

I have already said that the exciting cause sometimes throws the blood in the face instead of the brain, as is observed in angry persons; and constitutes what is called facial apoplexy.

Cullen divides them according to there being an effusion of water or blood, and treats of them accordingly. But the effects are the

same whatever be its cause; whether from blood or serum; and there should be no difference in the plan of cure.

Appearances on Dissection. When dissecting those who have died of this disease; the following circumstances have been observed. The vessels of the plexus choroides are often distended with blood; and bodies similar to hydatids in other places have been found, connected with them, some containing red blood; at other times a quantity of fluid similar to serum.

There is sometimes, though more rarely, an effusion or (more properly) a secretion of pus in the brain. Large tumours have also been found; and the brain is sometimes flaccid and softer than natural; at other times inclinatural hard.

The arteries and veins are generally found turgid with blood; a quantity of extravasated

blood

blood or serum is almost always found either between the cranium and duramater, the dura and pia mater, or in the cavities or ventricles of the brain.

Morgagni relates some cases, where the brain appeared as if corroded; but he says there was always blood found in the cavities produced by corrosion; but it is more probable, that those cavities were produced by that extravasated blood.

Prognosis. In some cases of this disease, it is almost impossible to foretel the event, but in others the prognostic may be made with more certainty

The following are the signs of Fatality. When it occurs in young men, and persons under the age of thirty Dr. Rush says he never saw but one recovery. It is always fatal in children; also when one side is convulsed. a foaming at the mouth, and the coming on of a chilly

fit

fit is always fatal. a full bounding or slow pulse is also unfavourable.
The absence of fever in the commencement or the coming on of a fever late in the disease, is almost always fatal. after bloodletting if the pulse becomes intermitting it is very alarming. The face is sometimes white; which is much more alarming than when red. If it comes on without any premonitory signs it is always dangerous. If the symptoms continue violent for some days it is generally fatal; also if the sphincters of the anus and bladder are relaxed in the beginning of the attack, it is always dangerous. When the patient has lost the power of deglutition it denotes a violent disease; and lastly when there is a cold and clammy sweat, the face having a cadaverous appearance, the eyes fixed and dull. marks the near approach of death.

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The favourable signs are, the presence of fever or a quick and frequent pulse at the coming on of the disease. General sweats, and the palsy in one side are also favourable. A drowsiness and loss of memory, almost always follow the recovery. The return of any accustomed evacuation if it has been suspended is always favourable. The return of any former habits, of body or mind are also favourable.

Cure. In the forming state of this disease the loss of a few ounces of blood, or a purge, will often prevent it altogether; and if it does not, it will tend very much to lessen its violence and duration.

As soon as we are called to a patient in a paroxysm of this disease, the first thing that ought to be done, is to remove all bandages, or ligatures from around the patient, open the shirt collar and take off the shoes and stockings or boots; at the same time, the

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room should be cleared of all unnecessary attendants; and the windows and doors should be thrown open. The head of the patient should also be elevated.

Bloodletting. This should be regulated according to the state of the pulse, and the habits of the patient. In all cases of a full habit, and where the disease has been preceded by marks of a plethoric state, it is to be used very largely; It is very often necessary to take from fifty to a hundred ounces in a short space of time. Who has been recommended to draw blood from the jugular veins and temporal arteries; but this is not so convenient as drawing it from the arm; and when taken in this manner it answers every purpose of the other, if it be in sufficient quantities; therefore it is to be preferred; but when from any circumstance we cannot draw blood from the arm in sufficient quantities,

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the temporal artery aught to be divided. sometimes the pulse is depressed; in those cases the blood should be drawn in small quantities at a time, and often repeated; after a while the pulse will become full and tense, when we may bleed freely. Cupping and scarifying the temples and back part of the head, should be performed if the system will not bear bleeding.

Purges. These are of the greatest service in this disease; the bowels should be emptied assoon as possible; for this purpose, glysters may be used if the patient is unable to swallow; but as soon as he recovers a little and is able to swallow; purges are to be given by the mouth; but I do not think that they aught to be very drastic, as is the opinion of several respectable authors.

Cometics. These have been much recommended by some practitioners; and particularly by the celebrated Dr. Fothergill; but they aught never

never to be used until after bloodletting has been practised. They are peculiarly useful when the disease is brought on by a full meal, or any thing taken into the stomach.

Blisters have also been useful in some cases of this disease, but they aught not to be applied until after bloodletting.

Cold water or Ice, is a very important remedy in this disease and aught never to be neglected, particularly where the head is unusually hot; previous to their application the hair should be shaved off, and the application made by means of wet cloths, or confined in a bladder. Cool and fresh air is very useful in this disease. It also necessary to keep the lower extremeties defended from cold.

Sometimes the system is prostrated beyond the point of reaction, and here we must have recourse to stimulants, such as blisters, sinapisms &c. sinapisms in those cases are always

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to be preferred, for they stimulate more and do not evacuate serum. sometimes the actual cautery must be used; volatile substances applied to the nose, and certain sounds of a very acute nature; all of these have been used with more or less success in this stage of the disease.

The means of preventing a recurrence of this disease is to avoid all its exciting causes; avoid the stimulus of too much aliment; excess should be particularly guarded against just before going to bed. The absence of any usual stimulus should be avoided.

In those persons accustomed to high living the food should be cordial, but in small quantities. Indigestable food of all kinds should be avoided. The patient should also avoid a change of diet as much as possible. Malt liquors of all kinds should be avoided. The patient may take a little madeira wine,

according

according to the state of his system; this is the more necessary if he has been accustomed to the use ardent spirits.

The exercise of the patient should be gentle, but constant. sudden passions of the mind, as terror, anger, &c. should be avoided.

all the occasional causes are to be avoided, such as cold and wet feet; tight ligatures, intense study, &c. If the person has been accustomed to an evacuation from the hemorrhoidal vessels, or any other part, he should either bring back the accustomed discharge, or substitute another. an old sore or cutaneous eruption should always be tolerated.

The patient should avoid sleeping on his back, or with his head low, or always on one side. sleeping on a mattrass is useful for persons disposed to apoplexy; it produces restlessness, and prevents the accumulation of blood in the brain.

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The practice of smoking or chewing tobacco, should not be laid aside in those accustomed to it.

a constant determination of blood aught to be kept up to the feet, by keeping them warm, applying sinapisms or burgundy pitch to them.

Costiveness and flatulency should be particularly guarded against. If notwithstanding after those remedies have been used, the symptoms of the disease should make their appearance, we must have immediate recourse to bleeding purging low diet &c.

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Edwards – Apoplexy – 1811

1. Apoplexy
2 Apoplexy –
3 Cholera –
4 Cholera Infant.
5 Cholera morbus
6 Cholera –
7 Dyspepsia –
8 Dyspepsia –
9 Hypochondriasis –
10 Pleuritis –